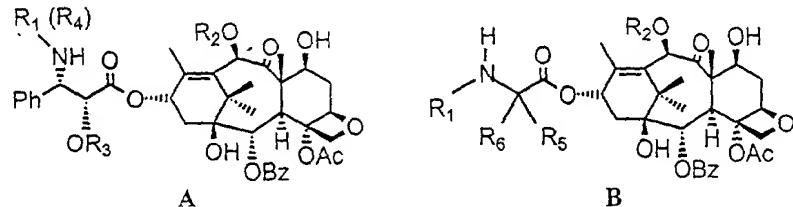


CLAIMS

We claim:

1. Anti-neoplastic and/or anti-leukemic effective compound selected from the formulae A and B:



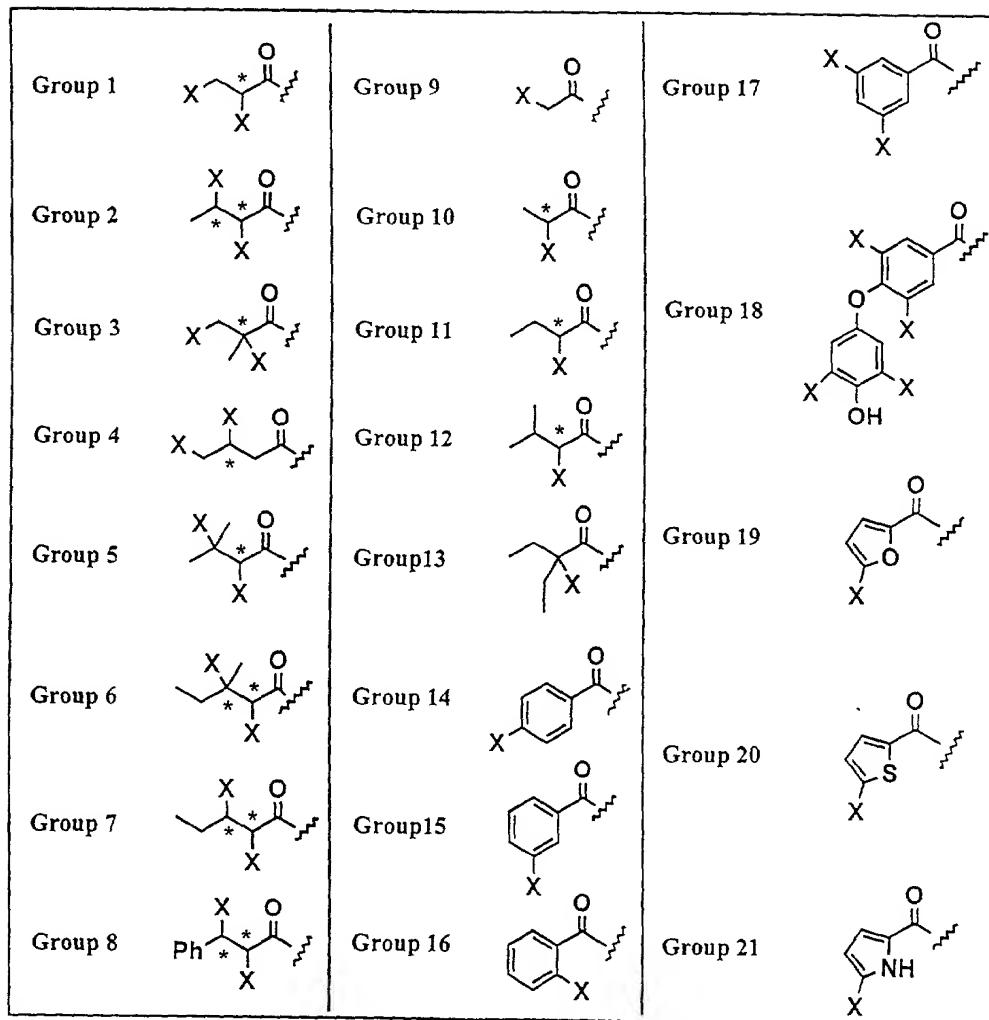
wherein

for general formula A: wherein R₁ is mono or dihalogenated acyl group, aroyl group (Table 1), alkyloxy-carbonyl group or aryloxy-carbonyl group (Table 2) and R₃ is hydrogen or halogenated group, and R₂ is hydrogen or acetyl groups; wherein R₄ is PhCO or Me₂COCO or CH₃CH=C(CH₃)CH=CO, R₅ is a halogenated group (Tables 1 and 2);

for general formula B: wherein R₁ is mono or dihalogenated acyl group or aroyl group (Table 1), alkyloxy-carbonyl group or aryloxy-carbonyl group (Table 2) and R₂ is hydrogen or acetyl group, and R₅ is any group from Table 3;
R₆ is H or Me;

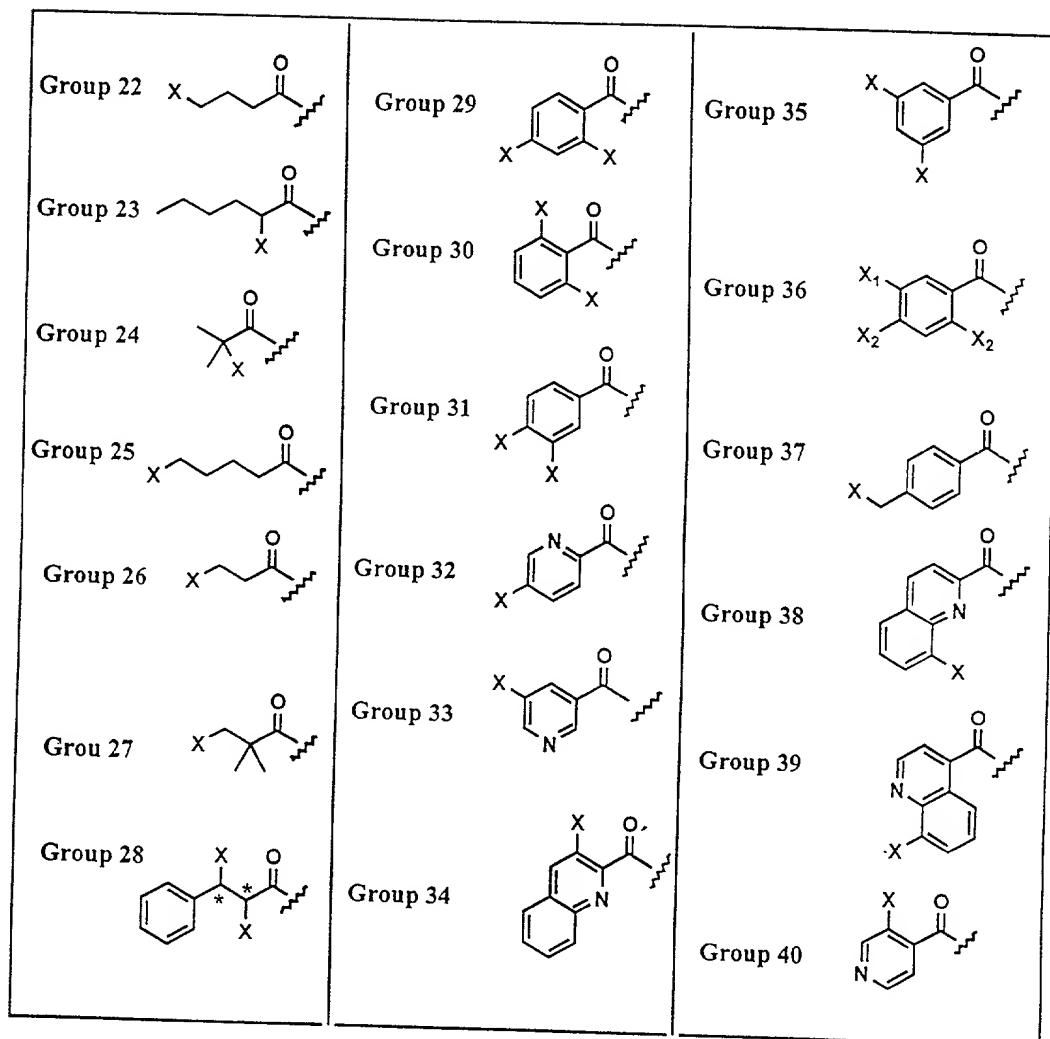
and wherein groups of Tables 1, 2 and 3 are selected from

Table 1 Structures of Halogenated Acyl and Aroyl Groups



X: halogen (Cl or Br or I or F)

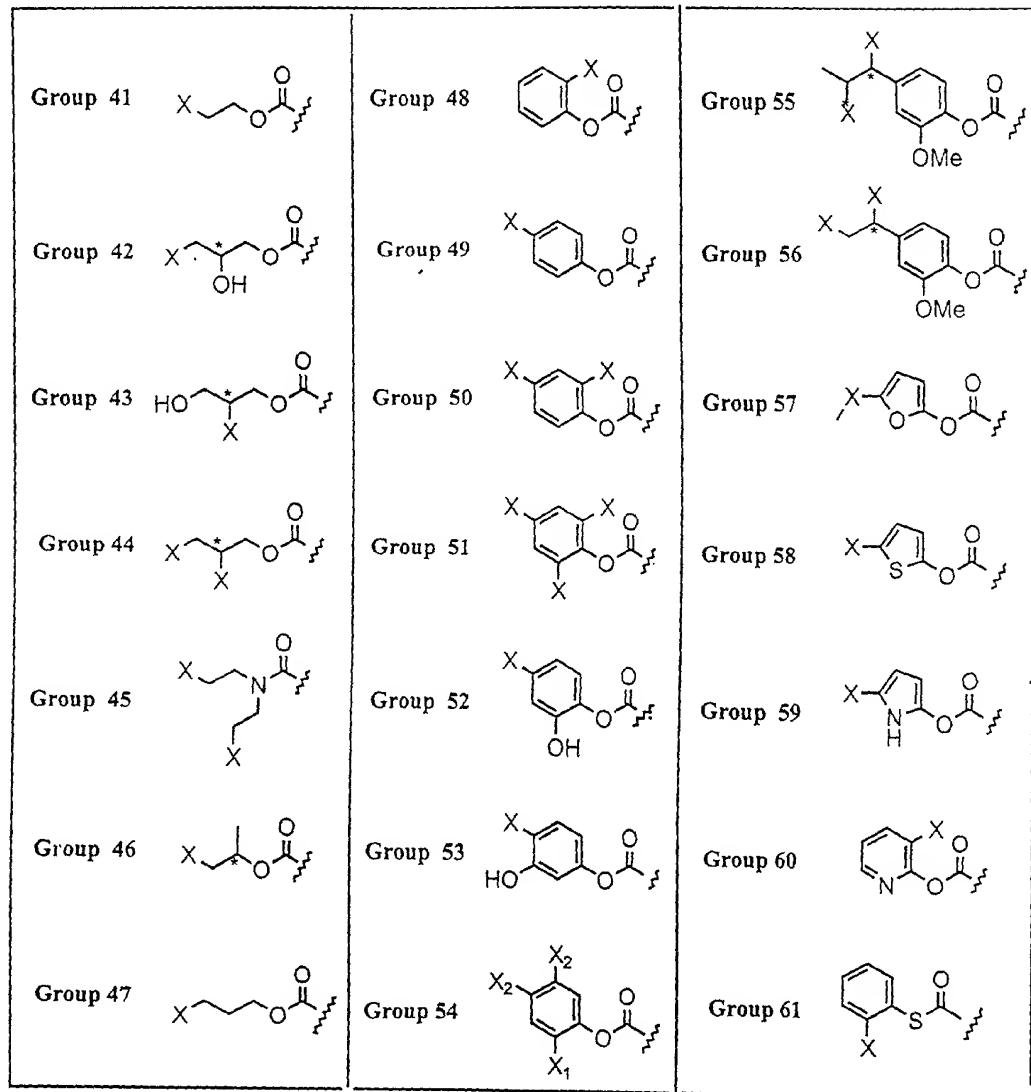
Table 1 (Contd)



X: halogen (Cl or Br or I or F)

X₁: one type of halogenX₂: other type of halogen

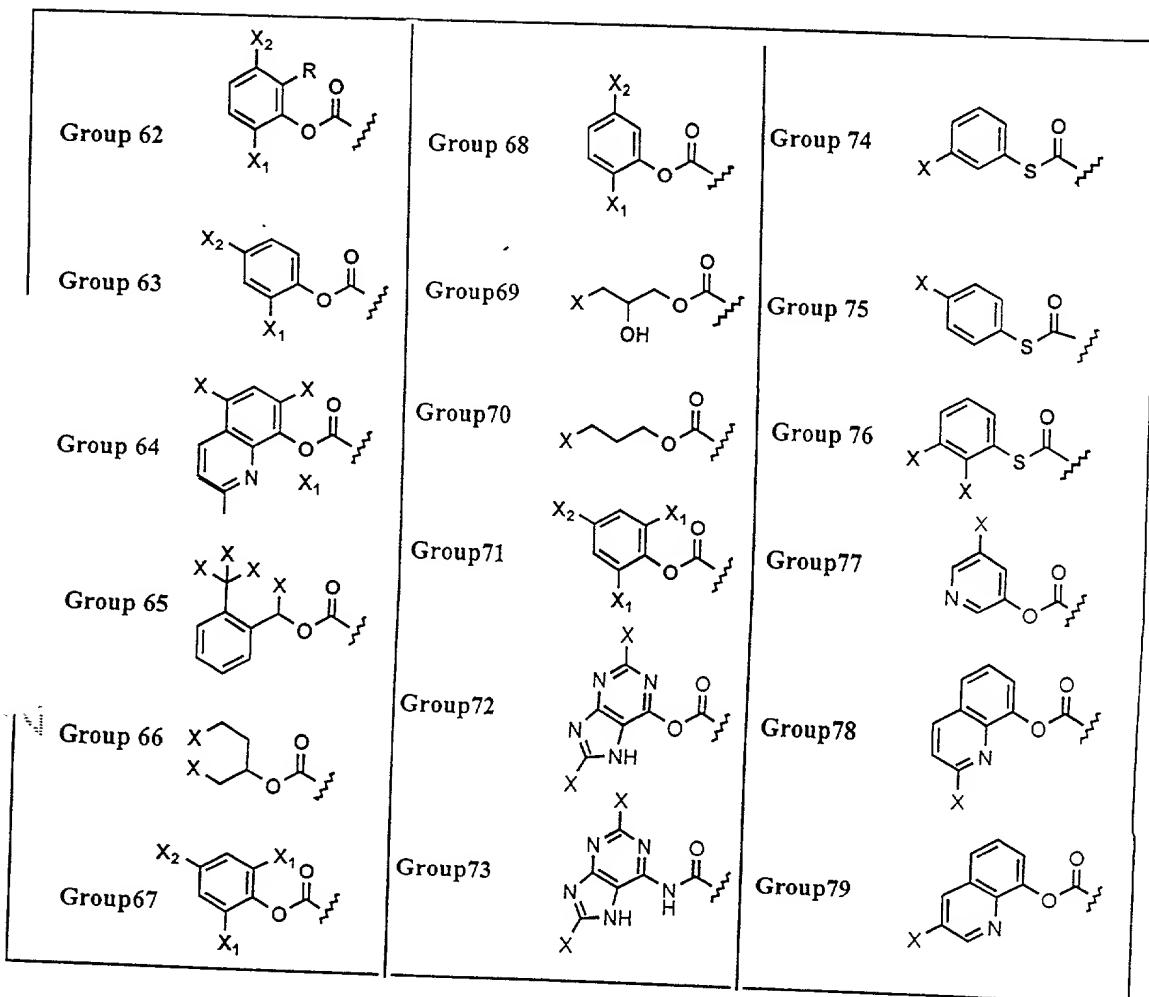
Table 2 Structures of Halogenated Alkyloxy- and Aryloxy-Carbonyl Groups



X: halogen (Cl or Br or I or F)

X₁: one type of halogenX₂: other type of halogen

Table 2 (Contd)

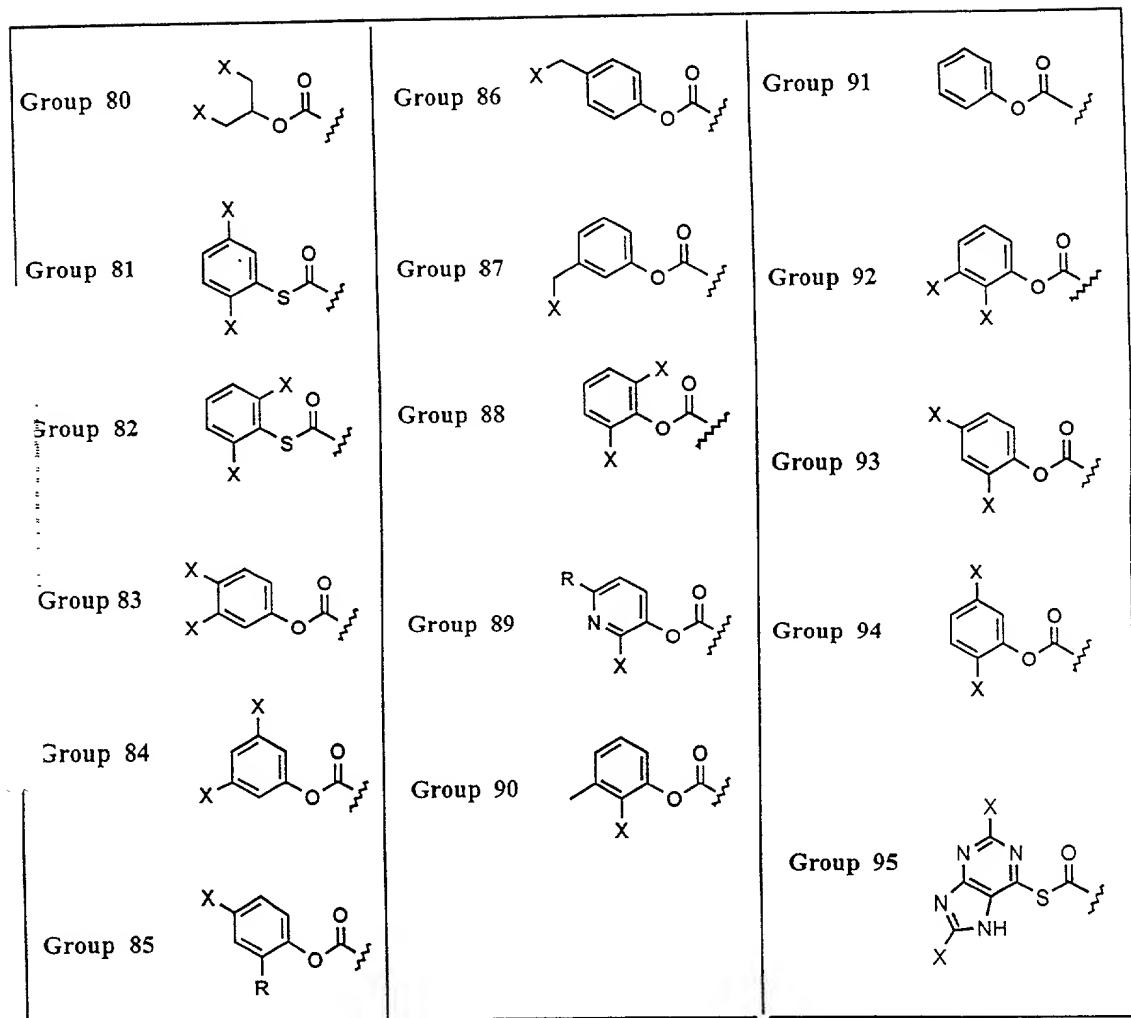


X: halogen (Cl or Br or I or F)

X₁: one type of halogen

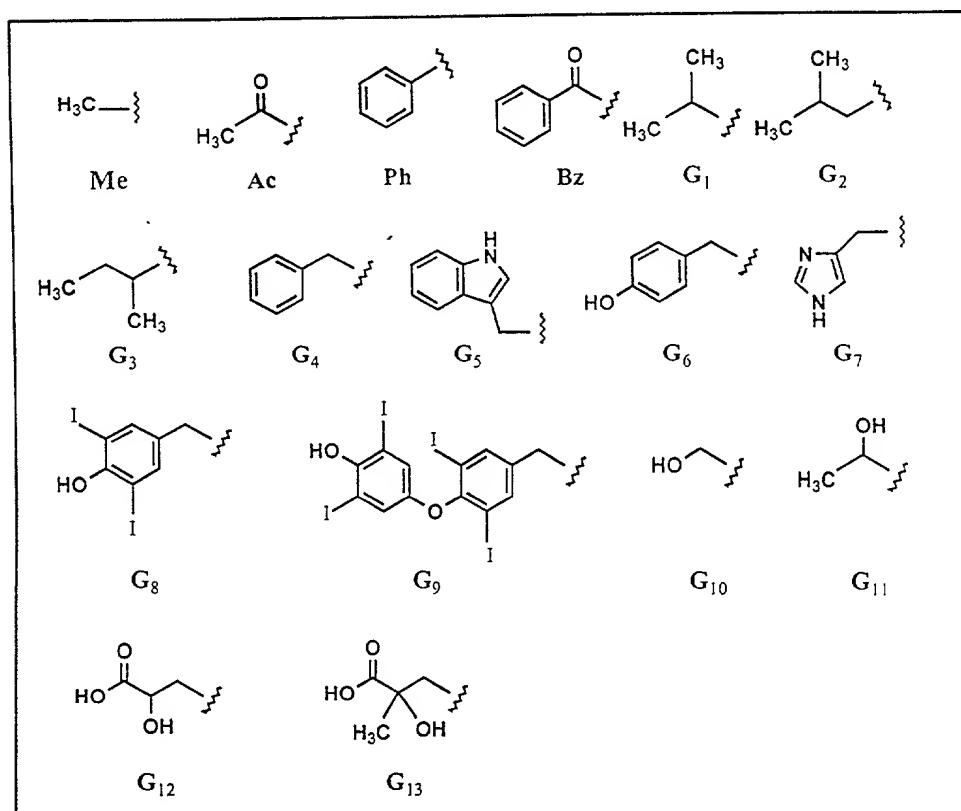
X₂: other type of halogen

Table 2 (Contd)



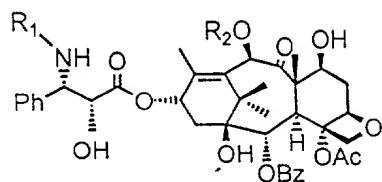
X: halogen (Cl or Br or I or F)

Table 3. Group Structures of Amino Acids and Their Codes Used in This Patent



2. A compound of claim 1 of the formula:

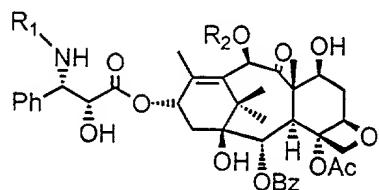
TYPE I



wherein R₁ is a group selected from Table 1 (groups 1 to 40);
and R₂ is H or Ac;

3. A compound of claim 1 of the formula:

TYPE II

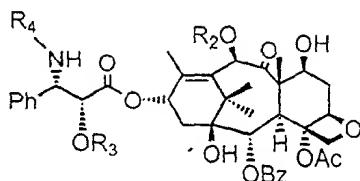


wherein R₁ is a group selected from Table 2 (groups 41 to 95);
R₂ is H or Ac;

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4. A compound of claim 1 of the formula:

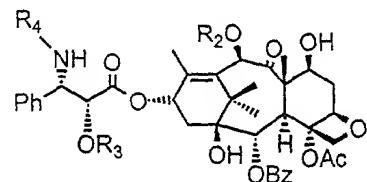
TYPE III



wherein R₃ is a group selected from Table 1 (groups 1 to 40);
and R₂ is H or Ac, and R₄ is PhCO or Me₃COCO or CH₃CH=C(CH₃)CO;

5. A compound of claim 1 of the formula:

TYPE IV

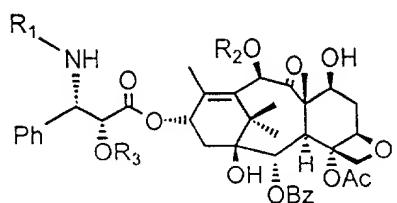


wherein R₃ is a group selected from Table 2, (groups 41 to 95),
R₂ is Ac or H, and R₄ is PhCO or Me₃COCO or CH₃CH=C(CH₃)CO;

- 46 -

6. A compound of claim 1 of the formula:

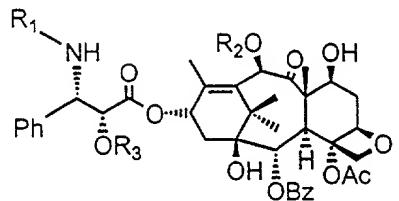
TYPE V



wherein R₁ is a group selected from Table 1 (groups 1 to 40);
R₂ is H or Ac;
R₃ is a group selected from Table 2 (groups 41 to 95);

7. A compound of claim 1 of the formula:

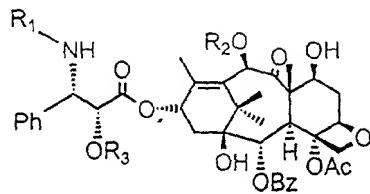
TYPE VI



wherein R₁ is a group selected from Table 2 (groups 41 to 95);
R₂ is H or Ac;
R₃ is a group selected from Table 1 (groups 1 to 40);

8. A compound of claim 1 of the formula:

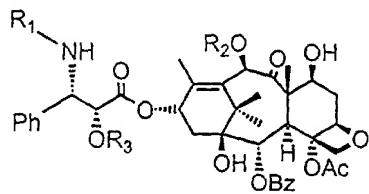
TYPE VII



wherein R₁ is a group selected from Table 1 (groups 1 to 40);
R₂ is H or Ac;
R₃ is a group selected from Table 1 (groups 1 to 40);

9. A compound of claim 1 of the formula:

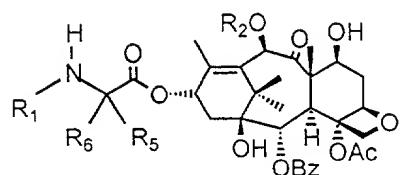
TYPE VIII



wherein R₁ is a group from Table 2 (groups 41 to 95);
R₂ is H or Ac;
R₃ is a group selected from Table 2 (groups 41 to 95);

10. A compound of claim 1 of the formula:

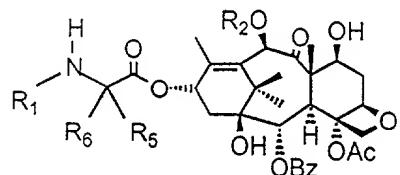
TYPE IX



wherein R₁ is a group selected from Table 1 (groups 1 to 40);
R₂ is H or Ac;
R₅ is H or Me or G₁ or G₂ or G₃ or G₄ or G₅ or G₆ or G₇ or G₈ or G₉ or G₁₁ or G₁₂ or G₁₃;
R₆ is H, only in the case when R₅ is G₁₀ the group R₆ is H or Me;

11. A compound of claim 1 of the formula:

TYPE X



wherein R₁ is a group selected from Table 2 (groups 55 to 95);
R₂ is H or Ac;
R₅ is H or Me or G₁ or G₂ or G₃ or G₄ or G₅ or G₆ or G₇ or G₈ or G₉ or G₁₁ or G₁₂ or G₁₃;
R₆ is H, only in the case when R₅ is G₁₀ the group R₆ is H or Me;

12. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 1 or a pharmaceutically acceptable salt thereof.

13. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 2 or a pharmaceutically acceptable salt thereof.

14. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 3 or a pharmaceutically acceptable salt thereof.

15. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 4 or a pharmaceutically acceptable salt thereof.

16. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 5 or a pharmaceutically acceptable salt thereof.

17. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 6 or a pharmaceutically acceptable salt thereof.

18. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 7 or a pharmaceutically acceptable salt thereof.

19. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 8 or a pharmaceutically acceptable salt thereof.

20. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 9 or a pharmaceutically acceptable salt thereof.

21. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 10 or a pharmaceutically acceptable salt thereof.

22. A pharmaceutical formulation which comprises as an active ingredient a compound of claim 11 or a pharmaceutically acceptable salt thereof.

23. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 1.

24. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 2.

25. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 3.

26. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 4.

27. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 5.

28. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 6.

29. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 7.

30. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 8.

31. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 9.

32. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 10.

33. A method for treating humans in need thereof comprising administering to said humans an anti-cancer or anti-leukemic effective amount of the compound of claim 11.